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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,934	09/09/2003	Barry Wixey	TN-2347B	1594
7590 Adan Ayala, Esq. Black & Decker Inc. 701 E. Joppa Road, TW-199 Towson, MD 21286		03/09/2007	EXAMINER SELF, SHELLEY M	
			ART UNIT	PAPER NUMBER
			3725	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/657,934	WIXEY ET AL.
	Examiner Shelley Self	Art Unit 3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 December 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 19 and 20 is/are allowed.
 6) Claim(s) 1-18 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 29 June 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 12/22/06.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on December 22, 2006 has been considered but is ineffective to overcome the prior art reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh et al. (5,771,949) in view of Liao (5,829,499) as noted in the previous Office Action (8/18/06). With regard to claims 1, 10 and 15, Welsh discloses a power planer for planing a top surface of a workpiece comprising: a base assembly (20); a carriage assembly (26) disposed above the base assembly, the carriage assembly comprising a cutter head assembly (52), the carriage assembly being vertically movable to change distance between the base assembly and the carriage assembly; a hand crank (96) attached to the carriage assembly for changing the distance between the base assembly (col. 6, lines 36-43) and the carriage assembly; a material removal gauge (370) disposed on the carriage assembly; a switch (72) disposed on the carriage assembly; and a height scale (106) disposed on the base assembly; wherein the material removal gauge, the switch and the height scale are on the front side of the power planer, and the hand

crank is substantially on the front half of the power planer. (Examiner notes that because the height scale is on side 16, which is on the base 20, the scale is also on the base via the side). Welsh does not disclose the hand crank being vertically movable with the carriage assembly. Liao teaches in a closely related art, a power planer (fig. 1) for planing a top surface of a workpiece including a base (20), carriage assembly (30) including a cutter head, a hand crank (50; fig. 4) attached to the carriage assembly and vertically movable with the carriage assembly (col. 3, lines 11-35; fig. 4). Liao teaches the hand crank vertically movable with the carriage assembly for ease of adjusting the height or vertical distance of the carriage assembly relative to the base. Because the references are from a closely related art and deal with a similar problem (i.e. material removal from a workpiece via a vertically adjustable cutterhead) it would have been obvious at the time of the invention to one having ordinary skill in the art to construct Welsh's hand crank to be vertically movable with the carriage assembly so as to efficiently adjust the vertical position of the carriage assembly and cutterhead relative to the base assembly as taught by Liao.

Furthermore, it would have been equally obvious at the time of the invention to one having ordinary skill in the art to construct Liao having a material removal gauge, height scale and switch on the front side of the planar so as to manually control power to the cutterhead as taught by Welsh.

With regard to claim 2, Welsh discloses the switch and hand crank on the same side half. Examiner notes the switch and hand crank on the same half of the planer half is defined as that split along the longitudinal length of the planer.

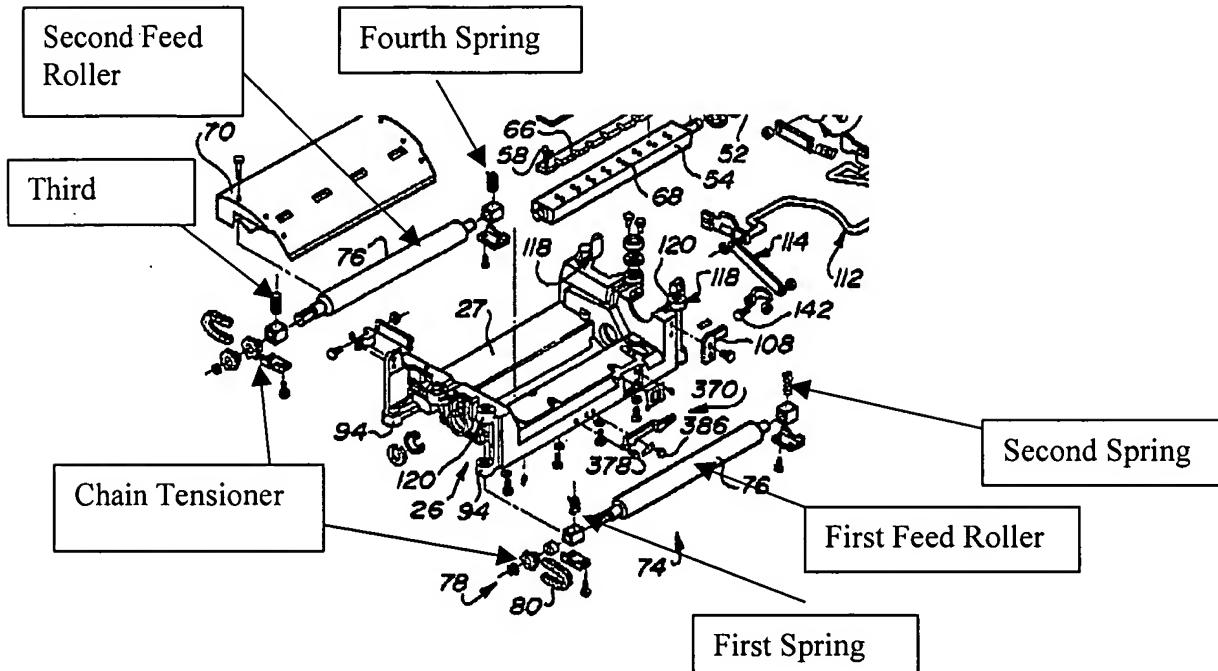
With regard to claim 3, Welsh discloses handles (96, 30, 112). Examiner notes no structure has been positively defined relative to the handles, the recitation “speed selector” does not positively define structure of the handle.

With regard to claim 4, Welsh discloses a carriage height mechanism (106, 108) disposed on the carriage assembly and disposed on the front half of the power planer (fig. 1).

Further regarding claim 10, as noted above (clm. 1), Welsh discloses a base, carriage assembly, hand crank, material removal gauge, switch and height scale. Welsh further discloses the carriage assembly comprising a motor (col. 6, lines 9), a cutterhead assembly (26, 52) driven by the motor, the cutterhead assembly being coupled to a transmission (78), a first roller (76) assembly drivingly connected to the transmission, a second roller assembly (76) drivingly connected to the first roller assembly, the carriage assembly being vertically movable to change distance between the base and the carriage assembly (col. 6, lines 6-17).

With regard to claims 11 and 13, Welsh discloses the first and second rollers (76) drivingly connected to the transmission via a chain (80; fig. 2; col. 6, lines 11-12).

With regard to claims 12 and 14, Welsh discloses a chain tensioner mechanism (fig. 2) for maintaining constant tension on the chain (fig. 2).



Further regarding claim 15, as noted above with reference to claim 1, Welsh further discloses first, second, third and fourth springs (fig. 2). Welsh is silent to the spring forces, however it is inherent that Welsh's first and third springs provide unequal force because as a workpiece is initially gripped and feed into the planer apparatus via the first feed roller the first and second springs provide equal forces to maintain the workpiece level and straight. As material is removed from the workpiece and the workpiece is continually feed through the planer the second roller grips the workpiece and pulls the workpiece through the planer device. Because less material is ejected out of the planer than initially put it, i.e. material has been removed via the carriage assembly and cutterhead, less force is necessary to grip and pull the work piece. Accordingly the springs that provide the force to the feed rollers (76) have differing spring forces. As to the optimal selection of the spring forces, Welsh is silent, however Applicant's disclosure fails to provide any criticality to unequal spring forces and only nominally recites such. The mere recitation of differing values for the spring forces does not in itself

warrant patentability and would be determined via routine engineering experimentation and practices.

Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh et al. (5,771,949) in view of Liao (5,829,499) and Buttke (2,792,036) as noted in the previous Office Action (8/18/06). With regard to claims 5 and 9, as noted above with reference to claim 1, Welsh discloses a power planer comprising a base, carriage, cutterhead assembly, hand crank, material removal gauge, switch and height scale. Welsh also discloses the cutterhead having a main body. Welsh is silent to three knives disposed on the main body.

Further as noted above, Liao teaches a power planing having a base, carriage, cutterhead, hand crank vertically movable with the carriage. For the reasons noted above with reference to claim 1, it would have been obvious at the time of the invention to one having ordinary skill in the art to replace, Welsh's hand crank with a hand crank vertically movable with the carriage as taught by Liao.

Buttke teaches in a similar art a planer having a cutterhead with a main body wherein three knives are disposed on the main body (fig. 27). Buttke teaches this construction for consistent surfacing of the workpiece surface. Because the references are from a closely related art it would have been obvious at the time of the invention to one having ordinary skill in the art to replace Welsh's single blade cutterhead with a cutterhead having three knives for improved surfacing or removal of material from a workpiece as taught by Buttke.

As to the knives being locked in a horizontal position (clm. 9), Welsh discloses a locking mechanism for locking the cutterhead and carriage at any desired position, therefore the ability to so lock the knife/blade at a horizontal position.

With regard to claims 6 and 7, Welsh discloses at least six screws (60).

With regard to claim 8, both Welsh and Liao disclose a cutterhead lock mechanism (Welsh 172, 210, 240, 292, 310; Liao figs. 6, 7).

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh et al. (5,771,949) in view of Liao (5,829,499) and Chen (5,988,239) as noted in the previous Office Action (8/18/06). As noted above with reference to claim 1, Welsh discloses a base, carriage assembly, cutter head, first and second rollers (76) drivingly connected (col. 6, lines 6-17) via chain transmission, a hand crank, a material removal gauge, and a height scale. Welsh does not disclose the hand crank movable vertically with the carriage assembly. For the reasons noted above with regard to claim 1, it would have been obvious at the time of the invention to one having ordinary skill in the art to replace, Welsh's hand crank with a hand crank that is movable vertically with the carriage assembly so as to efficiently adjust the vertical distance or depth of the carriage and cutterhead as taught by Liao.

Welsh is silent to the first and second roller assembly lower than the cutter head or the first roller assembly lower than the second. It would have been obvious at the time of the invention to arrange Welsh such that the first and second roller assemblies were lower than the cutterhead or that the first roller assembly is lower than the second roller assembly, because mere

rearrangement of parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Moreover, Chen teaches in a similar art a planer having a cutterhead, first and second roller assemblies rotatably drivingly connected to the cutterhead via a chain and transmission so as to synchronize rotation of the rollers. Chen further teaches that the roller assemblies are lower than the cutterhead (60) for efficient feeding of the workpiece, the first roller assembly being forced lower than the second to initially grip and feed the workpiece into the planer device. Chen teaches the rollers (80, 90) being biased downward/lower via coil springs. Examiner further notes that because the roller centers are lower than that of the cutter head the rollers are lower than the cutterhead. Because the references are from a similar art and deal with similar problem (i.e. feeding a workpiece into a planer apparatus via spring biased roller assemblies) it would have been obvious the time of the invention to one having ordinary skill in the art to construct Welsh such that the roller assemblies were lower than the cutterhead so as to efficiently feed a workpiece into the planer as taught by Chen.

Allowable Subject Matter

Claims 19 and 20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: For the reasons noted in the Office Action (8/25/05) claims 19 and 20 are deemed allowable over the prior art of record.

Response to Arguments

Applicant's arguments filed December 22, 2007 have been fully considered but they are not persuasive. Applicant's remarks are drawn to the failure of prior art references, Welsh and Liao to disclose a hand crank "on the front half of the power planer. This argument however is not deemed persuasive, because the recitation to a "front half" is relative and not finite, i.e. the front depends only from an initial starting location or point. Examiner further notes that the claims as written do not positively recite any spatial positions or locations, i.e. the front has not been clearly defined. According Examiner notes the front to be that position that is foremost and because the planers of both Welsh and Liao can be move, i.e. rotated the front is relative. Accordingly the rejection is proper and stands.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is 571-272-4524. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


SSelf
Primary Examiner
March 1, 2007